UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,825	11/21/2003	Alberto DiBella	5041.001	2975

27324 7590 06/16/2009

MARK D. BOWEN, ESQ.
MALIN HALEY DIMAGGIO BOWEN & LHOTA, P.A.
1936 S. ANDREWS AVENUE
FT. LAUDERDALE, FL 33316

EXAMINER	
DRODGE, JOSEPH W	
ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
06/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,825	DIBELLA ET AL.	
	Examiner	Art Unit	
	Joseph W. Drodge	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al patent 3,907,686 in view of DeVisser et al patent 4,297,209 (both of record) and in view of Macia et al patent 5,490,924.

Fletcher discloses the claimed pump means 20, separation tube 30, means for centrifugally rotating or spinning 40, extraction conduit means 60, and monitoring and feedback

means 82,84 and 90 (claim 1 of '840). Fletcher et al disclose in the embodiment comprising figures 3, 7 and 8, a closed loop system encompassing pump means 21, cyclonic or centrifugal separation tubular chamber 31, means for spinning the stream of media entering the tube (tangentially oriented inlet 30), extraction conduit means 36 for selectively extracting inner radial layers of media, filter 10, auxiliary filter 10a, filter 10a being described as idential in construction to filter 10 and equally regeneratable in column 5, lines 3-6), the filters disclosed as constructed such that an inlet feeds fluid and media to the outside (annulus) of a cylindrical filter media, with fluid being filtered passing through the filter to an interior downstream filtered outlet (column 2, lines 45-65, etc. and figure 1, with means 13 to clean the filter by way of a spray tube having a plurality of apertures to allow "jets" of backwash fluid to dislodge material on the inner and outer surfaces of the filter (column 3, lines 16-44). Various uses of the filter are disclosed at column 8, lines 55-67 including in paper mills.

The claim differ in requiring the backwashing tube to be rotatable. However, DeVisser teaches a "self-cleaning cylindrical filter with outside/in flow during operation with a backwash shower/spray assembly that rotates within the filter element (Abstract, column 3, lines 1-25); the filter uses including paper manufacturing facilities (column 1, lines 12-13). It would have been obvious to one of ordinary skill in the art to have adapted the backwash means of DeVisser to the Fletcher filter, in order to more thoroughly clean the entirety of the cylindrical filter surfaces.

The auxiliary filter that is backwashed is taught in both Fletcher and DeVisser to be enclosed in a cylindrical housing containing two longitudinal ends (see ends 26 and 46 of housing 21/47 of DeVisser. The claims now additionally differ from both Fletcher and DeVisser in requiring the backwashing to be effected by a bypass, backwashing, outlet opening out of one

of the housing longitudinal ends. Macia teaches a self-cleaning water filter for industrial uses, with a rotatable, shower/spray assembly similar to that of DeVisser, that sprays water from an elongate tube against the inner cylindrical surface of a filter with backwash fluid containing the particulates ejected through a valve-controlled bypass outlet 35 in such longitudinal end wall (see figure 5; Summary of the Invention and column 6, lines 52-column 7, line 13). It would have been further obvious to one of ordinary skill in the filtration arts to have manufactured the filter to have such backwash, bypass, end outlet, in order to facilitate a vortex, swirling action during filter cleaning, so as to simultaneously settle out heavier particulates and sweep finer debris from the filter surface.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al patent 3,907,686 in view of DeVisser et al patent 4,297,209, as applied to claim 1, and further in view of Caracciolo patent 5,632,903 of record . For claim 8, in DeVisser, the pressure of the backwash fluid as well as communication of backwash fluid source and spray tube (by valve control) may be controlled by a monitoring and control means, responsive to relative level of contamination of component medium on the filter surfaces (column 12, lines 11-45). This may be sensed by a differential probe. Claim 8 further differs in requiring that the control means be also operable for controlling the rotational speed of the spray tube. Caracciolo teaches such control mechanism (column 3, line 38-column 4, line 3). Such further modification of the Fletcher system would have the obvious benefit of allowing increased effectiveness of the rotating spray means in removing an increased buildup of agglomerated and blinding contaminants (see column 1, lines 27-40 of Caracciolo suggesting such motivation).

Applicant's arguments with respect to claims 1 and 8 have been considered but are somewhat moot in view of the new ground(s) of rejection utilizing Macia. Macia generally teaches the combination of housing and backwashing features that DeVisser and Fletcher were deficient in.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at his direct government telephone number of 571-272-1140. The examiner can normally be reached on Monday-Friday from approximately 8:30 AM to 12:30 PM and 2:00 PM to 6:00 PM.

Additionally, the examiner's supervisor, Duane Smith, of Technology Center Unit 1797, can reached at 571-272-1166.

The formal facsimile phone number, for official, formal communications, for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD
6/15/2009
/Joseph W. Drodge/
Primary Examiner, Art Unit 1797